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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/045,385	03/20/98	MATSUSHIMA	Y 48240

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MM12/0706

EXAMINER

EISENHUT, H

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 07/06/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/045,385

Applicant(s)
Matushima et al

Examiner
Heidi Eisenhut

Group Art Unit
2871



☒ Responsive to communication(s) filed on Apr 23, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-17 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-17 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Mar 20, 1998 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☒ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Drawings

1. Figures 6 and 7 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Claim Rejections - 35 USC § 103

2. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kadota et al, US Patent # 5,818,550.

Kadota et al discloses a first substrate (0), a second substrate (12), a liquid crystal layer (13) wherein the first substrate includes a plurality of switching elements (TFT), light shielding layers on the switching elements, a plurality of picture element electrodes (1) and a plurality of color filters (9R, 9G, 9B). Kadota et al does not disclose a light shielding frame layer around a periphery of the display region. However, all displays have an opaque frame surrounding the display to prevent light from entering. Thus having a light shielding frame layer around a periphery of the display region was conventional. It would have been obvious to one of ordinary skill in the art to have a light shielding frame layer around a periphery of the display region since it was conventional.

Kadota et al does not disclose forming the light shielding layers and light shielding frame layer through an electrochemical process. However, this is a product by process limitation and is

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not patentably distinctive. This limitation does not distinguish over the prior art because no distinct product was produced.

Kadota et al does not specifically disclose a driving circuit for driving the switching elements. However, switching elements require a driving circuit in order to function and is thus inherent. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a driving circuit for driving the switching elements since this is an inherent feature of active matrix liquid crystal displays.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Heidi Eisenhut whose telephone number is (703) 305-0850.

H. Eisenhut
June 29, 1999



WILLIAM L. SIKES
SUPERVISORY PATENT EXAMINER
GROUP 2500